



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,197	12/13/2001	Charles E. Taylor	112440-729	3618
29190	7590	10/05/2005	EXAMINER	
BELL, BOYD & LLOYD LLC P.O. BOX 1135 CHICAGO, IL 60690-1135			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,197

Applicant(s)

TAYLOR ET AL.

Examiner

Thao T. Tran

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004 and 03 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34,36,38-40,42-47,52,55,59-68,70-72,74,75,77,79-82,88-93 and 119 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/1/04,9/3/04</u> | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 34,36,38-40,42-47,52,55,59-68,70-72,74,75,77,79-82,88-93 and 119.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 1/2/2004 has been entered.

2. The preliminary amendment filed 9/3/2004 is acknowledged. The IDS filed on 9/1/2004 and 9/3/2004 are also acknowledged.

3. Claims 34, 36, 38-40, 42-47, 52, 55, 59-68, 70-72, 74-75, 77, 79-82, 88-93, and 119 are currently pending. Claims 1-33, 35, 37, 41, 48-51, 53-54, 56-58, 69, 73, 76, 78, 83-87, and 94-118 have been canceled. Claim 119 has been newly added. Claims 34, 40, 52, 54, 59-68, 70-72, and 88 have been amended.

4. Due to the preliminary amendment and the IDS filed on 9/3/2004, the Allowance in the claims in the Office action of 10/7/2003 has been withdrawn. A new rejection is issued as follows.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1711

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 34, 36, 38-40, 42-47, 52, 55, 59-68, 70-72, 74-75, 77, 79-82, 88-93, and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al. (US Pat. 5,290,343).

The reference is cited in the IDS filed on 9/1/2004.

Morita discloses a electrostatic precipitator for cleaning air, the precipitator comprising an air inlet, an air outlet, discharge electrodes 106, 10, and collector electrodes 105, 15 (see Figs. 1, 4, 6-7, and 12). The dust collector 15 comprises a multiple electrode sheets 14 (see Fig. 12). Morita further discloses the discharge electrodes and the dust collector 15 are detachably mounted on the frame 20. The discharge electrodes are connected to handles 34 whereas the dust collector electrodes are connected to handle 38, so that the electrodes can be easily removed from the frame for cleaning (see col. 7, ln. 52-61; col. 8, ln. 4-29). In the prior art section, Morita further discloses the collector electrodes connected to panel 102, which is detachably mounted on a front opening of the body casing and can be removed for cleaning (see col. 1, ln. 20-22; col. 2, ln. 1-3). Thus, Morita describes the handle connected to the collector electrodes could be positioned on the side or the bottom of the air cleaning device, whereas the handle connected to the discharge electrodes is positioned on the top surface of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have had the handle connected to the collector electrodes on the top surface, bottom, or the side of the device and would have worked equally well in handling the removal of the electrodes from the device for cleaning.

Morita does not teach the collector electrodes to be hollow and U-shaped. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made,

Art Unit: 1711

that the configuration of the electrodes would have been designed in a way that would have brought more benefits depending upon user's preference and intended use. A hollow electrode would have been lighter and easier to handle, and a U shape would have provided more surface area to collect more dust particles, and thus providing better air quality.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt
September 19, 2005


THAO T. TRAN
PATENT EXAMINER